PATENT CLAIMS

1.   Procedure, for control of data file transmission
between transmitting (30-33) and receiving units (20), at
which examples of the data file (F) that shall be
transmitted/transferred are stored at a plurality of
transmitting units (30-33), including the steps
        to request transmission of segments (S1-S4) of the
data file (F) from a plurality of transmitting units (30-
33), and
        to receive said segments (S1-S4) from a plurality of
transmitting units (30-33).

2.   Procedure, as claimed in patent claim 1, at which
each separate segment (S1-S4) is transmitted from only one
transmitting unit.

3.   Procedure, as claimed in patent claim 1 or 2, at
which each separate transmitting unit transmits only one
segment (S1-S4) of the file.

4.   Procedure, as claimed in patent claim 1,
including the step
        to, when the transmission of a segment (S1-S4) from a
transmitting unit is completed, request transmission of one
more segment (S1) of the data file (F) from said
transmitting unit, at which the transmission of this one
more segment (S1) from another transmitting unit has
started.

5.   Procedure, as claimed in patent claim 4, at which
the step to request transmission of one more segment (S1-
S4) includes the steps
        to determine for which segment (S1-S4) that largest
portion of the segment (S1-S4) remains to be transmitted,
and

to request transmission of this segment (S1).

6.   Procedure, as claimed in patent claim 4 or 5, at
which the step to request transmission of one more segment
(S1) includes the step
to request transmission of only a portion (S11) of
said more segment (S1), at which this portion (S11) is
included in the portion of the segment (S1) that has not
yet been transferred.

7.   Procedure, as claimed in patent claim 6, at which
the step to request transmission of a portion (S11) of said
segment (S1) includes the step
to determine how large portion of the segment (S1)
that remains to be transferred,
to estimate the transmission speed for the
transmitting unit (30) that is busy transmitting said
segment (S1) and for the transmitting unit (31) from which
transmission of said portion (S11) shall be requested,
to determine, depending on the estimated transmission
speeds, how large said portion (S11) shall be, and
to request transmission of said portion (S11).

8.   Procedure, as claimed in any of the previous
patent claims, including the steps
to estimate the transmission speeds from respective
transmitting unit (30-33), and
to request transmission of segments (S5-S8) of
different sizes, at which the size of respective segment is
determined on basis of the estimated transmission speeds.

9.   Procedure, as claimed in any of the previous
patent claims, including the step
to estimate the transmission speeds from respective
transmitting unit, and

to select transmitting units (30-33) for the transmission with regard to the estimated transmission speed from respective transmitting unit.

5   10.   Device for control of data file transmission between transmitting (30-33) and receiving units (20), at which examples of the data file (F) that shall be transferred is stored at a plurality of transmitting units (30-33), including

10   device to request transmission of segments (S1-S4) of the data file (F) from a plurality of transmitting units (30-33), and

       device to receive said segments (S1-S4) from a plurality of transmitting units (30-33).

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       11.   Device, as claimed in patent claim 10, at which each separate segment (S1-S4) is transmitted from only one transmitting unit.

20   12.   Device, as claimed in patent claim 10 or 11, at which each separate transmitting unit transmits only one segment (S1-S4) of the file.

       13.   Device, as claimed in patent claim 10, including

25   device to, when the transmission of a segments (S1-S4) from a transmitting unit is completed, request transmission of one more segment (S1) of the data file (F) from said transmitting unit, at which the transmission of this one more segment (S1) from another transmitting unit has

30   started.

       14.   Device, as claimed in patent claim 13, at which the device to request transmission of one more segment (S1-S4) includes

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device to determine for which segment (S1-S4) that largest portion of the segment (S1-S4) remains to be transmitted, and

device to request transmission of this segment (S1).

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15. Device, as claimed in patent claim 13 or 14, at which the device to request transmission of one more segment (S1) includes

device to request transmission of only a portion (S11)
10 of said segment (S1), at which this portion (S11) is included in that portion of the segment (S1) that has not yet been transferred.

16. Device, as claimed in patent claim 15, at which
15 the device to request transmission of a portion (S11) of said segment (S1), includes

device to determine how large portion of the segment (S1) that remains to be transferred,

device to estimate the transmission speed for the
20 transmitting unit (30) which is busy transmitting said segment (S1) and for the transmitting unit (31) from which transmission of said portion (S11) shall be requested,

device to determine, depending on the estimated transmission speeds, the size of said portion (S11), and
25   device to request transmission of said portion (S11).

17. Device, as claimed in any of the previous patent claims, including

device to estimate the transmission speeds from
30 respective transmitting unit (30-33), and

device to request transmission of segments (S5-S8) of different sizes, at which said device is arranged to determine the size of respective segment (S5-S8) on basis of the estimated transmission speeds.

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18.   Device, as claimed in any of the previous patent
claims, including
      device to estimate the transmission speeds from
respective transmitting unit, and
5   device to select transmitting units (30-33) for the
transmission with regard to the estimated transmission
speed from respective transmitting unit.

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Separate page

AMENDED CLAIMS

[received by the International Bureau on 12 September 2000 (12.09.00) ;
original claims 1-18 replaced by amended claims 1-14 (3 pages)]

1. Procedure, for control of data file transmission between transmitting (30-33) and receiving units (20), at which examples of the data file (F) that shall be transmitted/transferred are stored at a plurality of transmitting units (30-33), including the steps

to request transmission of segments (S1-S4) of the data file (F) from a plurality of transmitting units (30-33), and

to receive said segments (S1-S4) from a plurality of transmitting units (30-33), when the transmission of a segment (S1-S4) from a transmitting unit is completed, request transmission of one more segment (S1) of the data file (F) from said transmitting unit, at which the transmission of this one more segment (S1) from another transmitting unit has started, at which the step to request transmission of one more segment (S1) includes the step

to request transmission of only a portion (S11) of said more segment (S1), at which this portion (S11) is included in the portion of the segment (S1) that has not yet been transferred.

2. Procedure, as claimed in patent claim 1, at which each separate segment (S1-S4) is transmitted from only one transmitting unit.

3. Procedure, as claimed in patent claim 1 or 2, at which each separate transmitting unit transmits only one segment (S1-S4) of the file.

4. Procedure, as claimed in patent claim 1, at which the step to request transmission of one more segment (S1-S4) includes the steps

to determine for which segment (S1-S4) that largest portion of the segment (S1-S4) remains to be transmitted, and

to request transmission of this segment (S1).

5. Procedure, as claimed in patent claim 1, at which the step to request transmission of a portion (S11) of said segment (S1) includes the step

to determine how large portion of the segment (S1) that remains to be transferred,

to estimate the transmission speed for the transmitting unit (30) that is busy transmitting said segment (S1) and for the transmitting unit (31) from which transmission of said portion (S11) shall be requested,

AMENDED SHEET (ARTICLE 19)

to determine, depending on the estimated transmission speeds, how large said portion (S11) shall be, and
to request transmission of said portion (S11).

6.   Procedure, as claimed in any of the previous patent claims, including the steps
to estimate the transmission speeds from respective transmitting unit (30-33), and
to request transmission of segments (S5-S8) of different sizes, at which the size of respective segment is determined on basis of the estimated transmission speeds.

7.   Procedure, as claimed in any of the previous patent claims, including the step
to estimate the transmission speeds from respective transmitting unit, and
to select transmitting units (30-33) for the transmission with regard to the estimated transmission speed from respective transmitting unit.

8.   Device for control of data file transmission between transmitting (30-33) and receiving units (20), at which examples of the data file (F) that shall be transferred is stored at a plurality of transmitting units (30-33), including
device to request transmission of segments (S1-S4) of the data file (F) from a plurality of transmitting units (30-33), and
device to receive said segments (S1-S4) from a plurality of transmitting units (30-33), when the transmission of a segments (S1-S4) from a transmitting unit is completed, request transmission of one more segment (S1) of the data file (F) from said transmitting unit, at which the transmission of this one more segment (S1) from another transmitting unit has started, at which the device to request transmission of one more segment (S1) includes
device to request transmission of only a portion (S11) of said segment (S1), at which this portion (S11) is included in that portion of the segment (S1) that has not yet been transferred.

9.   Device, as claimed in patent claim 8, at which each separate segment (S1-S4) is transmitted from only one transmitting unit.

10.   Device, as claimed in patent claim 8 or 9, at which each separate transmitting unit transmits only one segment (S1-S4) of the file.

11. Device, as claimed in patent claim 10, at which the device to request transmission of one more segment (S1-S4) includes

device to determine for which segment (S1-S4) that largest portion of the segment (S1-S4) remains to be transmitted, and

device to request transmission of this segment (S1).

112.Device, as claimed in patent claim 11, at which the device to request transmission of a portion (S11) of said segment (S1), includes

device to determine how large portion of the segment (S1) that remains to be transferred,

device to estimate the transmission speed for the transmitting unit (30) which is busy transmitting said segment (S1) and for the transmitting unit (31) from which transmission of said portion (S11) shall be requested,

device to determine, depending on the estimated transmission speeds, the size of said portion (S11), and

device to request transmission of said portion (S11).

13. Device, as claimed in any of the previous patent claims, including

device to estimate the transmission speeds from respective transmitting unit (30-33), and

device to request transmission of segments (S5-S8) of different sizes, at which said device is arranged to determine the size of respective segment (S5-S8) on basis of the estimated transmission speeds.

14. Device, as claimed in any of the previous patent claims, including

device to estimate the transmission speeds from respective transmitting unit, and

device to select transmitting units (30-33) for the transmission with regard to the estimated transmission speed from respective transmitting unit.